

# STRUCTURE AND METHOD OF FABRICATING A TRANSISTOR HAVING A TRENCH GATE

## Abstract of the Disclosure

An integrated circuit transistor is fabricated with a trench gate having nonconductive sidewalls. The transistor is surrounded by an isolation trench filled with a nonconductive material. The sidewalls of the gate trench are formed of the nonconductive material and are substantially free of unetched substrate material. As a result, the sidewalls of the gate trench do not form an undesired conductive path between the source and the drain of the transistor, thereby advantageously reducing the amount of parasitic current that flows between the source and drain during operation.

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